



(i) a plurality of domains matching the wells on the surface of the base, and

(ii) microfluidic channels that supply fluid to the domains.

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C1  
B2 2 9. (Amended) The cassette of claim 1, wherein the domains are selected from the group consisting of etched domains and raised reservoirs.

B3 11 18. (Amended) The cassette of claim 10, wherein the domains are selected from the group consisting of etched domains and raised reservoirs.

## REMARKS

### 1. Information Disclosure Statement

The Examiner has stated that no references were considered unless they were cited by the examiner on PTO form 892. The Applicant reminds the examiner that this application was filed as a continuation under 37 CFR 1.53(b) of U.S. Patent Application Serial No. 08/865,341 filed May 29, 1997 (now U.S. Patent No. 6,103,479). According to MPEP 609, "the examiner will consider information which has been considered by the Office in a parent application when examines (A) a continuation application filed under 37 CFR 1.53(b)..... and a list of the information need not be submitted in the continuation....unless applicant desires the information to be printed on the patent."

However, in order to expedite prosecution of the present application, the Applicant is submitting an information disclosure statement herewith.

### 2. Drawings

As requested by the examiner, the Applicant is submitting formal drawings in response to the office action.

### 3. Section 112, second paragraph rejections

a. Claim 1 was rejected for the use of "the controlled array of cell types", based on the assertion that there was a lack of antecedent basis, and that the term



controlled" is indefinite. The Applicant traverses this rejection, but have nonetheless amended the claim.

b. Claim 9 was rejected as the sentence did not end in a period. The applicant traverses this rejection, as the claim has been amended to add a period.

c. Claim 12 was rejected based on the Examiner's assertion that the term "domains" is vague and indefinite based on the further assertion that each microfluidic channel provides fluid to an individual domain. The Applicants traverse this rejection. There is no limitation in claim 1 or 12 (which is dependent on claim 1) that each microfluidic channel provide fluid to an individual domain; thus, the use of the plural "domains" does not render the claim indefinite. In fact, claim 11 specifically recites the limitation asserted by the examiner to be in claim 1 and 12. Thus, the Applicant respectfully requests reconsideration and withdrawal of this rejection.

d. Claims 16-17 were rejected based on the examiner's assertion that the term "controlled" is indefinite, based on the further assertion that it is unclear if the applicant intends to claim "an ordered array of cells where the cells have a predetermined pattern, or a random ordering of the cells, wherein only the cell types have been predetermined." The Applicants traverse this rejection.

Both claims recite that cell type binding specificity in a well is dependent on the type of cell binding sites present in an individual well. Thus, it is clear that the "controlled" array of cell types refers to an ordered array of cells where the cells have a predetermined pattern based on the cell binding sites in the wells. Thus, the Applicant respectfully requests reconsideration and withdrawal of this rejection.

e. Claim 18 was rejected as indefinite, based on the assertion that the claim does not end in a period. The Applicant has amended the claim to include a period, thus obviating its rejection.

f. Claim 21 was rejected as indefinite, based on the examiner's assertion that the use of "domains" was indefinite, based on the further assertion that each microfluidic channel provides fluid to an individual domain. The Applicants traverse this rejection. There is no limitation in claim 17 or 21 (which is dependent on claim 17) that each microfluidic channel provide fluid to an individual domain, and thus the use of the plural "domains" does not render the claim indefinite. In fact, claim 20 specifically recites the



limitation asserted by the examiner to be in claim 17 or 21. Thus, the Applicant respectfully requests reconsideration and withdrawal of this rejection.

**4. Section 102 rejection**

The Examiner rejected claims 1 and 9-11 as being anticipated by Wilding (U.S. Patent No. 5,587,128). The Applicant traverses this rejection.

In order to anticipate, a reference must teach all elements of the claim. Wilding teaches a device for amplifying polynucleotides, and does not teach or suggest the following limitations of claim 1 (and thus of claims 9-11):

- a base with cell binding sites that comprise wells
- a fluid delivery system comprising a chamber that mates with the base
- a chamber with a plurality of domains matching the wells on the surface of the base.

Thus, the Wilding reference does not serve as a proper anticipatory reference, nor would it make the present invention obvious to one of skill in the art. Therefore, the Applicant respectfully requests withdrawal and reconsideration of this rejection.

Based on the above amendments and remarks, the Applicant believes that the application is now in condition for allowance. If there are any questions or comments regarding this Response, the Examiner is encouraged to contact the undersigned agent as indicated below.

Respectfully submitted,

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## MARKED UP VERSION OF CLAIM AMENDMENTS

I. (Amended) A cassette for cell screening, comprising

- b) a base having a surface, wherein the surface contains cell binding sites, and wherein the cell binding sites comprise wells, and
- b) a fluid delivery system for delivering a combinatorial of reagents to the [controlled array of cell types] wells; wherein said fluid delivery system comprises a chamber that mates with the base, wherein the chamber comprises:
  - (i) a plurality of domains matching the wells on the surface of the base, and
  - (ii) microfluidic channels that supply fluid to the domains.

9. (Amended) The cassette of claim 1, wherein the domains are selected from the group consisting of etched domains and raised reservoirs.

18. (Amended) The cassette of claim 17, wherein the domains are selected from the group consisting of etched domains and raised reservoirs.